THE

Malayan Agricultural Journal.

MAY, 1939

EDITORIAL.

Malaya at the Empire Exhibition.

With the approval of Government, we publish in this number an abstract of the report of the officer-in-charge of the Malaya Court at the Empire Exhibition held at Glasgow last year. In presenting this account as an abstract, we have omitted only technical details, personal notes, and criticisms designed to assist in the organization of future displays of a like nature.

The Court was in charge of Mr. W. N. Sands, assisted by Mr. F. de la Mare Norris. Both these officers had many years' experience in the Department of Agriculture, Malaya, as well as considerable experience of exhibition work on a large scale. In his report, Mr. Sands acknowledges assistance from many quarters, and without particularizing, we would echo his thanks to those who lent exhibits, to firms and individuals who gave excellent service in matters of transport, technical advice and help, as well as to those who assisted in the assembly of exhibits for which their Department or firm was primarily responsible. The relations between the officials of the Court and the Exhibition authorities and architects were throughout of a very cordial character, and grateful thanks are also due to the authorities for arranging for the accommodation and entertainment during their stay in Glasgow, of five Malay Government officers.

A committee, under the chairmanship of Mr. O. T. Faulkner, at that time Adviser on Agriculture, was formed in Malaya for the purpose of collecting and forwarding to Glasgow the main exhibits. This committee planned the position of the exhibits in the space available, and little departure was found necessary from the general arrangements designed by the committee. The Malayan Information Agency was responsible for the staging and maintenance of the exhibits in the Malaya Court. The Malaya committee decided to limit very strictly the number and variety of exhibits. It was felt that colonial displays at such exhibitions were usually so varied and numerous that the visitor was bewildered and left without any clear impression of the products of the country, or the life of its inhabitants. Consequently, the features stressed were:—export products—tin, rubber and pineapples; transport—rail, air and sea; arts and crafts, selecting only those likely to find a

market in Europe. Whatever criticism may be levelled at the exhibits themselves, or their display, there is no doubt that the exhibits impressed the visitor in the desired way.

Reports from private quarters were unanimous in praise of the Malaya Court, and no little credit for this is due to the Malayan Agency for their excellent organization at the Exhibition.

Certain of the exhibits have since been sent to San Francisco where they will form part of the display in the Johore State Pavilion at the Golden Gate Exhibition. We feel sure that the success attained at the Empire Exhibition will be repeated at San Francisco.

Original Articles.

THE MALAYA COURT, EMPIRE EXHIBITION, GLASGOW, 1938.

The Empire Exhibition was held in Bellahouston Park, Glasgow, from 3rd May to 29th October, 1938. The Park is 150 acres in area and about three miles from the centre of the city. The total number of visitors was 12,593,232; this was a highly satisfactory attendance considering that the weather conditions experienced throughout the period were very unfavourable. The Exhibition buildings were mostly of light construction in modern design and well set out, whilst the general lay-out, decoration and illumination of the grounds were most striking and attractive.

The Site and Building.

The Dominions and Colonial buildings were situated along each side of a broad avenue and facing a large central lake with multi-coloured fountains. This part of the Exhibition, with its flower-beds and water-effects, was very popular with visitors. At the western end of the south side of this avenue was the Colonial Pavilion, which included the Malaya Court. The building was erected by the Exhibition authorities and divided into four parts, namely:—(a) The Colonial Hall, (b) The West Indies, (c) Composite Colonial, (d) Malaya Court.

The Malaya Court, at the back of the Pavilion, was rectangular in shape and measured 84 ft. by 60 ft. There were also two small triangular alcoves in it which were used for the display of handwoven silks, and the Office and Information Bureau respectively. The total superficial area was 5,616 sq. ft.

Interior Construction.

The interior walls, which were of fibre board, were painted a pleasing shade of pale green. The central glass roof was screened with white muslin, which besides hiding the unsightly beams of the roof, formed a useful ceiling without shutting out too much light.

The office accommodation, roughly 16 ft. by 12 ft., was sufficient and proved most convenient for administrative work and interviews. The Information Bureau, 18 ft. by 7 ft., with its bookshelves and counter also served its purpose well.

Suitable platforms and wall-stands, faced with mahogany plywood, were obtained from a local firm of shopfitters, as were also the three large glass showcases for the silk fabrics. For the display of silver, pewter, embroidery, *kris*, *parang*, and small basketry work, six glass cases were hired for the period of the Exhibition. By placing most of the arts and crafts articles in these cases there was no damage done by dust or handling, whilst petty pilfering was prevented.

Above the front and back entrances to the Court, two facia boards were displayed; these had on them the name "Malaya" in large, raised, red-coloured letters. Where necessary to protect large dioramas and models, stainless steel guard-rails, supported by mahogany posts, were fixed. Besides preventing damage to exhibits they added considerably to the general appearance of the Court.

Interior Decoration.

On the walls, immediately above the stands, large framed photographs illustrating agricultural industries and products, tin-mining, public buildings, local scenery, and Singapore re-housing schemes were hung. Over these were arranged photographs of the Sultans of the different States, whilst surmounting all were the State crests.

Flags of the Colony and of all the States were hung around the central hall of the Court.

Three large framed maps of Malaya were placed on the walls near to the office and main entrance, namely, a large general, an aviation, and a geological map. The maps were those published and supplied by the Survey Department, S.S. and F.M.S.

Lighting.

The main lamps and supply of electric current to them were provided by the Exhibition authorities, but the lamps for lighting stands, models, dioramas, show-cases and office were installed according to requirements, as were also the separate meters, switches and wiring.

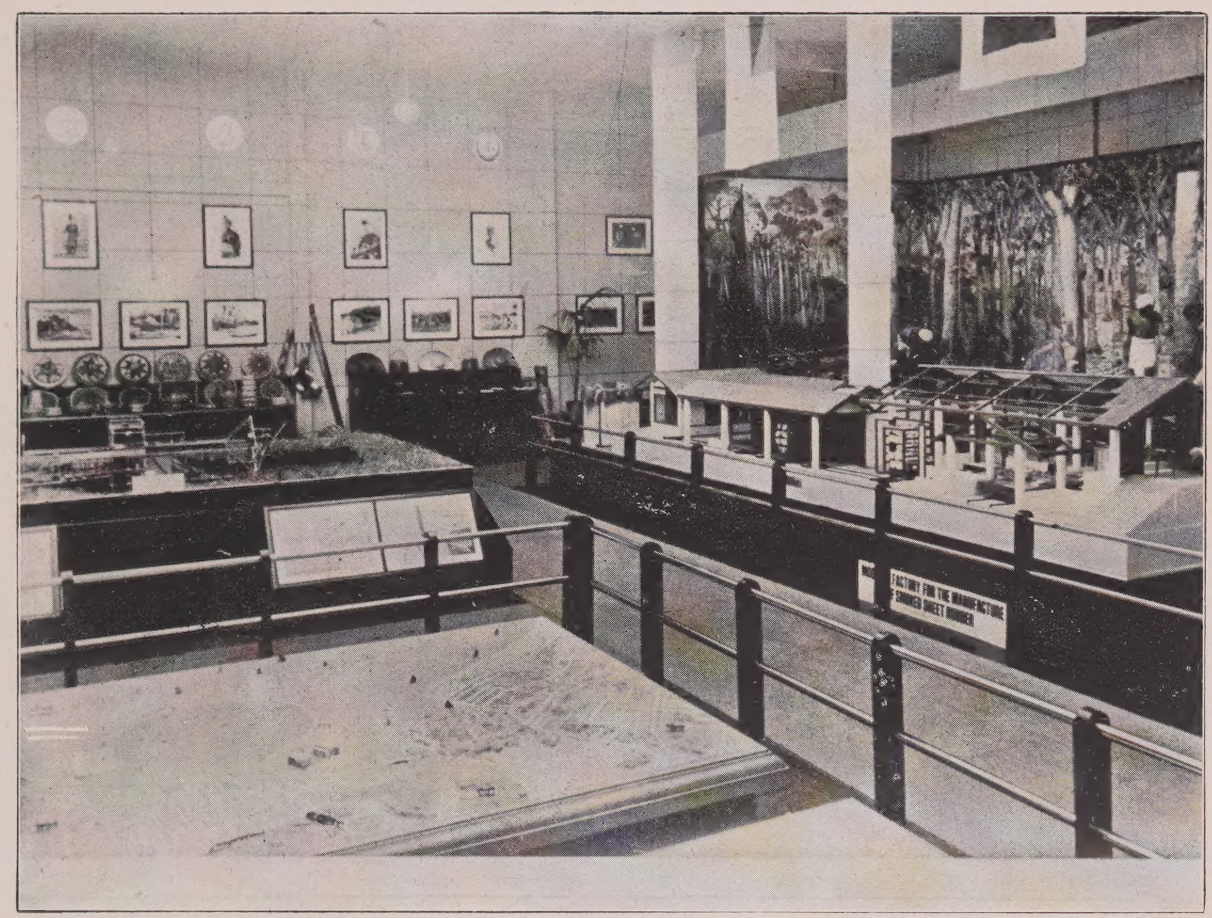
The general lighting of the Court by large white globe lamps was on the whole satisfactory, but towards the close of the Exhibition, when dust had collected on the muslin ceiling under the roof lamps, its effectiveness was considerably reduced.

Lay-Out.

The arrangement of the large models on the floor space, so that they might be shown to the best advantage, required much consideration and several modifications of the original proposals from Malaya were necessary so as to obtain a clear and unobstructed view of the whole Court and to provide ample gangway space for the circulation of the crowds of visitors. That the final arrangement was eminently satisfactory was evidenced by the favourable comments which were received from visitors, many of whom considered the lay-out and decoration of the Court were among the best in the Exhibition.

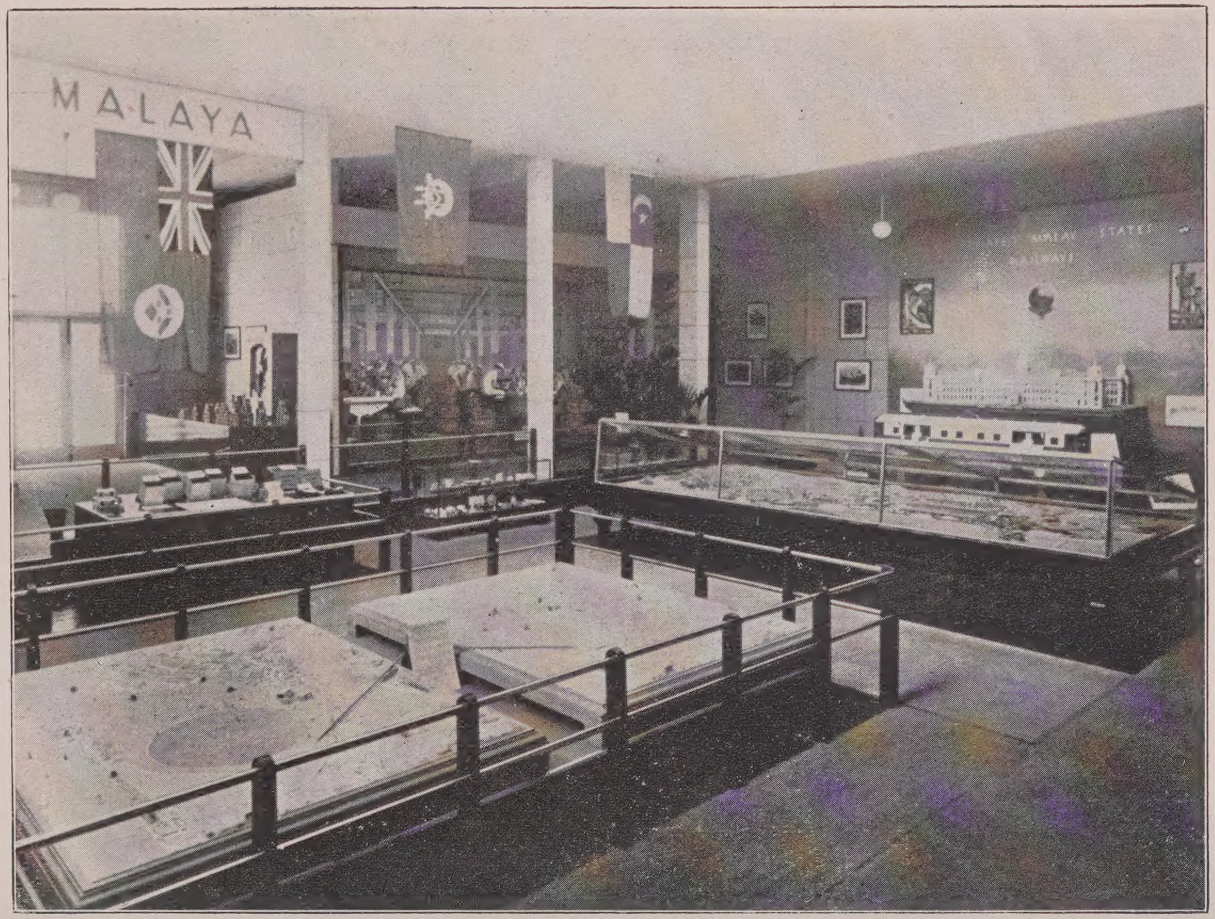
The central floor space at its western end was occupied by the large Federated Malay States Railways exhibit. In front of this was the model of the Singapore Harbour. In the centre were two models of the new Singapore Civil Airport, and beyond these a working model of a tin dredge in an iron tank. At the eastern side and opposite the dredge, were a weaving diorama and a stand containing miscellaneous articles of native work.

At the northern side, and left of the front entrance, were the office and information bureau, and stands with baskets, hats, embroidery, *kris*, *parang*, boats, blow-pipes and gongs. At the right of the entrance there was a furnished boudoir, 26 ft. by 8 ft. with show-cases for the display of handwoven silks. Beyond the boudoir was a stand containing a diorama of a coconut plantation, coconut and oil palm products, together with models of the fruit-bunches of each palm.



Malaya Court, Empire Exhibition, 1938.

Diorama of Rubber Estate and Model Rubber Factory on the right.



Malaya Court, Empire Exhibition, 1938.
Pineapple Diorama in centre background.

The Court had a raised floor at the back, 84 ft. by 24 ft. and 18 ins. high. In front and below this were staged glass-cases containing Kelantan and Brunei silverware and pewter; a stand with exhibits of Malayan tea; and a large model of a modern rubber factory.

On the raised floor at each end were placed two large dioramas representing (a) a rubber plantation and (b) a pineapple factory, whilst on stands on each side of the gangway leading to the back entrance were, at left, a model of the Brunei oil-field and, at right, a small diorama of a pineapple plantation and an extensive collection of tinned pineapples of different brands.

Considerable attention was devoted to large and small descriptive labels of the exhibits. Each model, diorama, or group of articles, was fully described and explained. The labels were much appreciated by visitors who at once obtained most of the information they desired without taking up the time of the staff.

Agriculture.

Rubber. The industry was represented by two striking exhibits (a) a diorama of a rubber plantation and (b) a scale model of a rubber factory.

The large diorama at the back of the Court was 30 ft. by 15 ft. by 12 ft. and showed a typical scene on a rubber estate with four life-size figures of Indian labourers tapping and transporting latex. There were five real rubber tree trunks each 11 ft. high, one of which was adapted to give a representation of latex flowing from the tapped bark into a cup. The realistic and beautifully painted back and one side canvases depicted portions of a mature rubber plantation whilst the other side canvas showed virgin jungle. The diorama was effectively lighted by means of fifteen 200 Georcay reflectors. It can be safely stated that this exhibit was one of the most attractive to visitors in the Exhibition, besides being of considerable educational value.

The excellent model rubber factory, 20 ft. by 5 ft., was placed below and in front of the rubber diorama. It showed, to one-eighth actual size, the structure and arrangement of a modern factory for producing smoked sheet rubber. It demonstrated the method of conveyance of latex from the field; the bulking and coagulating tanks; sheeting battery method of transporting the sheets on trolleys from the rollers to and through the divisions of the smoke house; the furnace and flues and packing shed; whilst cases and samples of smoked sheet ready for shipment were placed at the end of the stand. The method of preparing smoked sheet from latex was fully described on a large label in the centre of the exhibit. The model attracted much attention and like the rubber diorama was very instructive.

Pineapples. The pineapple exhibits occupied a prominent position in the Court; they comprised a 30 ft. by 15 ft. by 12 ft. diorama of a pineapple canning factory, a small diorama of a pineapple plantation, and canned pineapple products.

The large diorama depicted the interior of a factory in the State of Johore. There were two life-size figures of Chinese operatives, wearing white shirts and rubber gloves, sitting at tables preparing slices and cubes of pineapples. There were

also baskets of model fruit, cases of canned fruit and other articles. The back canvas showed a number of Chinese at work in the factory. One side canvas illustrated the machinery and work of the canning room, and the other, Chinese labourers shipping cases of canned pineapples. Like the rubber diorama the whole was well lighted by means of fifteen 200 Georcay reflectors. The diorama evoked a considerable amount of interest and was the means of bringing to the notice of hundreds of thousands of people the conditions under which the fruit is prepared for market in Malaya and the importance of the local industry.

On a wall-stand, 12 ft. by 6ft., adjoining the large diorama was a small diorama of a pineapple plantation showing plants in fruit; this was a very useful addition to the stand as so many people appeared to think that the fruit grew on trees.

Many well-known brands of canned slices and cubes were arranged in groups in front of the diorama. Two of the, as yet, lesser known products were small cubes, termed "Dolly Cubes" and pineapple juice named "Pinex." Among the business inquiries were several concerning these products.

Other Canned Fruit. A Penang firm sent for exhibition a small number of tins of canned rambutan, mangosteen pulp, mangosteen juice and young coconut pulp. The products were a constant source of interest and inquiry by visitors who wished to purchase and taste them.

Tea. Attention was called to the production of tea in Malaya by means of well prepared samples and packets of locally manufactured brands. The exhibits consisted of large samples in chests of the following grades of tea: Broken Orange Pekoe, Orange Pekoe, Pekoe, Fannings and Dust. Around the chests were placed attractive 1 lb. packets of the produce of four plantations.

Many inquiries were made as to where the different kinds of tea could be obtained in the United Kingdom.

Cutch. A small exhibit of this valuable tanning substance, derived from mangrove bark in the State of Brunei, was exhibited. It consisted of small boxes and bags of the extract, together with samples of leather and fishing nets tanned and preserved with it.

Coconut and Oil Palms. Although the extensive coconut and oil-palm industries were not originally intended to be represented, it was found possible to include exhibits of these from Malaya House and so add considerably to the interest and value of the display as a whole. The exhibits of the coconut industry were a small, but very realistic, diorama of a coconut plantation near the coast, a model of a bunch of coconuts, unhusked and husked nuts, copra, coconut oil and coconut charcoal. The oil palm exhibits included a model of a full-size bunch of fruit, palm oil and palm kernels. Large photographs of both coconut and oil palm plantations were placed on the wall above the exhibits. The stand with these exhibits was most popular and it was nearly always thronged with visitors.

Photographs. As it was not possible to deal adequately with many other crops produced in Malaya, several of these, namely, rice, spices, arecanut, tapioca and fruits, were illustrated by means of a large collection of excellent photographs.

Tin Mining and Oil Production.

Tin Dredge. It was originally intended that the tin mining industry should be represented by two large working models of a tin dredge and an open-cast mine respectively. Owing, however, to difficulties experienced in Malaya in obtaining a suitable model of the latter, only the working model of a modern tin dredger was available: this was exhibited by the London Tin Corporation. The whole exhibit, with its mahogany surround, occupied a space of 15 ft. 6 ins. by 9 ft. 6 ins. The dredge was situated in the centre of the tank which was filled with muddy water. Two small electric motors supplied power for driving the bucket-chain and the revolving screen. Around the outside of the tank were fixed splendid photographs of tin-dredgers at work and methods of recovering the ore. The dredge itself was a finely made model of one of the latest types in operation in Malaya.

Along the sides at the top of the tank was a rough grass border to represent undredged ground and on this were placed suitable descriptive labels and specimens of tin-ore. A leaflet giving details of the operation of the dredge was freely distributed.

This outstanding and instructive exhibit was always a centre of interest to visitors.

It was unfortunate that other Malayan methods of tin mining; specimens of tin in various forms, as well as the many uses to which the metal is put, could not have been demonstrated, but exigencies of space prevented this. There were, however, large photographs of other methods than dredging shown, such as an open cast, and gravel pump, mines.

Oil Production. The important mineral oil industry of Brunei was brought prominently to public notice by means of excellent scale models of a production block and an imaginary section of the local strata with pipe and casing leading to the source of oil. There were also samples of the different grades of oil produced and photographs of the field. The production block consisted of a painted background showing the jungle-covered country with roads and derricks and, in the foreground, separators, field collecting and storage tanks. The whole exhibit, with its descriptive labels, was particularly interesting and instructive.

Arts and Crafts.

The arts and crafts sections were well represented by excellent collections of articles of Malayan craftsmanship. They may be classified as under:—

(*a*) Silver, pewter and brass
(*b*) Basketry
(*c*) Walking sticks
(*d*) *Parang* and *kris*
(*e*) Embroidery
(*f*) Boats and blowpipes
(*g*) Miscellaneous.

(*a*) *Silver, Pewter and Brassware.*

Silver. Excellent specimens of silver articles, both in design and workmanship, were sent from Kelantan and Brunei to illustrate the work of local silversmiths. All of the exhibits were suitably arranged in two glass cases which were specially hired for the purpose.

Among the 178 articles from Kelantan were bowls, dishes, knives, forks and spoons, condiment sets, necklaces, bracelets and brooches. The collection was much praised and admired. Towards the close of the Exhibition a licence was obtained from the Inland Revenue Authorities which enabled the articles to be sold. All were disposed of with the exception of three of the more expensive lots. Where any particular specimens were not available, but were specially desired, the inquirers were given the address of the Arts and Crafts Society in Malaya; this also applied to the Brunei exhibits.

The Brunei exhibits numbered 49 and included a cigarette box and cases, brooches, ash-trays, bowls, condiment sets, napkin rings, a gong and bell. Most of the designs were good and evoked favourable comment.

Pewter. A small collection of twelve pieces of Malayan pewter proved of much interest. It consisted of good examples of a bowl, tray, air-tight cigarette boxes, nut dishes, candlesticks, tea-caddy and tea-set. The articles were quickly sold. Owing to the limited supply of them a number of people were given the address of the makers in Kuala Lumpur.

(*b*) *Basketry.*

Under this heading was included all plaiting work in bamboo, leaves and grasses. The articles displayed were baskets, floor-mats, table-mats, trays, hand-bags, cushion covers, belts and hats. All were well made and cleverly designed examples. As at the Wembley Exhibition, these exhibits were very popular and especially the collection of baskets and trays from the Sultan Idris Training College at Tanjong Malim, and the handbags and mats from Port Dickson. Towards the end of the Exhibition all of the articles were rapidly disposed of and the demand far exceeded the supply.

There was an interesting development in regard to the finer plaiting work in different designs in that a large firm making fancy slippers wished to be put in touch with Malayan suppliers in order to obtain material for covering slippers of the firm's own make.

(*c*) *Walking Sticks.*

A collection of 115 walking sticks was shown. Although walking sticks are not generally used at the present time the exhibits commanded considerable attention. The largest number, namely 100, came from Kedah where they were made by a Malay. It was a remarkable collection of well made specimens in different kinds of wood, colour and shape, and no two sticks were alike. Another fine lot of five came from Selangor.

Malaya Court, Empire Exhibition, 1938.

Malaya Court, Empire Exhibition, 1938.
Display of Malayan Silk Fabrics.

The sticks were staged in specially made stands on each side of the counter of the Information Bureau, and, contrary to expectation, all were sold, except five defective ones.

(*d*) *Kris and Parang.*

The State of Perlis sent a set of six beautifully made small *kris*, three of which were mounted in ivory, while seven representative specimens were borrowed from a private collection. The above examples of this Malayan weapon were always of interest to visitors as were also the twelve *parang*, with their carved sheaths, from different States. Souvenir hunters purchased all of the *parang* and two of the lower-priced *kris*.

(*e*) *Gold Embroidery.*

In a separate glass case were displayed the following finely worked examples of gold-thread embroidery. From Perak came two cushion covers with the name "Sultan of Perak" in a circular design, and from Selangor, eleven white and eleven black small ladies' handbags, two velvet cushions, six shoe-tops, one pair of shoes and one pair of fans; whilst Pahang sent two velvet cushions. The exhibits, more particularly the handbags and the shoe-tops, attracted considerable attention, the latter leading to an inquiry from a firm of slipper makers regarding Malayan suppliers of the articles.

(*f*) *Boats and Blowpipes.*

The large well-built model of a fishing boat from Teluk Anson, with its mast, sail and numerous small appliances used in fishing in Malayan waters, was particularly attractive to persons interested in sailing and fishing. The two small boats from Pahang were also good models of their kind.

The six blowpipes with their quivers of poisoned darts were always popular and frequent explanations concerning the method of using them were necessary.

(*g*) *Miscellaneous.*

Specimens of novel, wooden, coloured flowers and foliage were sent from Singapore and were used for decorative purposes in the Silks Bureau.

There were other small arts and crafts exhibits, such as an elephant modelled in beeswax, carved wood, and six pieces of pottery in artistic designs from Tanjong Malim.

Other Exhibits.

Stamps. A collection of current issues of Malayan stamps from the Colony and each of the States was exhibited in a large glass frame near to the Information Bureau. The stamps proved of great interest and constant inquiries were made as to whether specimens could be purchased in the Court, or where obtainable.

Maps. Besides three large framed wall maps of Malaya, there were a number of the Colony, States, chief towns and hill-stations available for reference purposes, and particularly good use was made of them.

Pictures. Three excellent framed pictures of Malay life were loaned and hung in the Court. The paintings were highly praised. Reproductions of four pictures were also sent by the Agency so that those interested might obtain copies of them if they so desired.

Hand Weaving of Silk. The hand-weaving of silk fabrics was illustrated by means of a realistic and beautiful diorama measuring 12 ft. by 9 ft. Owing to delays in Malaya, it was not staged until 7th August, or three months after the opening of the Exhibition. The diorama depicted, at left, a Malay woman sitting on the verandah of a house, engaged in weaving on a real, primitive, handloom a piece of silk fabric with a gold-thread design, whilst another woman seated on the floor, at right, was winding bobbins. The back canvas showed a typical village with boys playing the basket-ball game, known as *sepak raga,* on the seashore, whilst on one side canvas was a typical coastal scene with fishing boats and on the other a rice field. The whole was covered with a real atap roof. The diorama was one of the most attractive in the Court and by general consent it and the rubber one were considered to be the finest of their kind in the Exhibition.

Silk Fabrics. Silk fabrics from Trengganu, Kelantan and Johore, of varying types from the heavy and elaborate gold-thread fabrics to the plain and mastuli silks, formed a prominent exhibit. A well-known London firm designed and made five striking dresses which were exhibited at the fashion parades in the Fashion Theatre at the Exhibition after being displayed in London.

The main purpose of the exhibit was to create a market for these fabrics. An agent was appointed for this purpose and a lady previously connected with British Industries House was in charge of the display at Glasgow. Valuable trade connexions were made and it was found that a potentially large market existed for the plain shot silks which could be sold at a reasonably low price. Unfortunately the resources of the industry in Malaya were not sufficiently developed to deal expeditiously with the trial orders that were forwarded and it is feared that the opportunity has been lost because guarantee of date of delivery is one of the most important factors necessary in order to secure and maintain trade.

The exhibit at Glasgow was well staged and created a great deal of interest, practically all the lower priced material being sold.

There is definitely not sufficient demand for the expensive gold-thread fabrics to warrant further attempts to exploit them, but the plain shot silks for dresses and the mastuli for furnishings did offer possibilities.

Transport.

Transport in Malaya was well represented by large models, photographs and posters sent by (a) the Federated Malay States Railways, (b) the Singapore Harbour Board, and (c) the Public Works Department.

Railways.

The Federated Malay States Railways exhibit occupied an area of 18 ft. by 10 ft. It consisted of two very fine models, namely the Central Railway Offices in Kuala Lumpur and a first-class day and night air-conditioned coach. The coach

was constructed by the staff of the Central Workshops of the Railways and was an excellent example of local craftsmanship. On a tall wooden, coloured, background were hung photographs of prominent railway buildings and coloured posters, and on stands on the platform were placed a map of the railways and further photographs.

The buildings and up-to-date equipment of the railways shown made a special appeal to visitors.

Singapore Harbour.

The splendid model of Singapore Harbour with its buildings, wharves and docks shown in detail, occupied a space of 19 ft. by 8 ft. by 6 ins. When staged it was completely repainted and a new plate-glass sloping cover erected over it. A number of beautifully made model liners and other craft were afterwards placed at the wharves and in the docks. In order to locate particular buildings, docks and other prominent features of the model, a series of electric buttons, placed around the exhibit, when pressed indicated by means of small lights the position of the place desired. This striking model was staged and reconditioned under the direction of an officer of the Singapore Harbour Board, who also had printed for distribution coloured leaflets describing the Harbour and giving the names and positions of the different ships shown as models. The exhibit was so popular that it was nearly always thronged with visitors.

Singapore Civil Air Port.

This was represented by two fine models, one showing in detail the site of the Air Port as it was in 1931, and before 262 acres of the tidal swamp were reclaimed, and the other, the circular landing ground, terminal buildings and hangars, also the dredged sea-plane channel protected by booms and the slipway adjacent to the landing ground. The models with their surrounding barrier occupied a space of 14 ft. by 10ft. An officer of the Public Works Department paid two visits to advise in regard to the siting and staging of the models which, with their map showing the position of the Air Port in relation to the town of Singapore and the descriptive labels, were always popular besides being instructive.

Propaganda.

Public attention was drawn to Malaya by the showing in the Exhibition Cinemas of three films, namely: "Five Faces of Malaya," "Copra" and "Rice." The first was shown at intervals in the Empire Cinema, whilst the two latter were shown in the Cinema of the Scottish Pavilion, and the "Copra" once in the East African Cinema in connexion with a lecture on "Coconut and Coconut Products" given on the 4th October by Mr. W. N. Sands.

The films, which were highly praised, were seen by a very large number of people.

On the 18th October Mr. F. de la Mare Norris read a paper on "Tropical Fruit," with special reference to Malayan pineapples, in the Congress Hall of the Exhibition, and on the 4th November Mr. Sands broadcast a twenty-minutes talk to schools on "Rubber Planting in Malaya" on the B.B.C. Scottish Regional Programme.

The local press was kept constantly informed of items of interest concerning the Court throughout the period of the Exhibition.

Publications.

The office library was supplied with a selection of useful reference books and publications loaned from Malaya House and the Incorporated Society of Planters. Among those to which frequent reference was made were:—A Dictionary of the Economic Products of the Malay Peninsula, Rubber Planting, An Outline of Malayan Agriculture, Mining in Malaya, and the Colonizer. The publishers of the periodical "British Malaya" also kindly supplied twelve monthly copies of the journal as issued.

The booklets and pamphlets distributed free to visitors were:—

A Brief Introduction to Malaya	150,000 copies
Rubber	17,000 ,,
Pineapples	19,000 ,,
Visit Malaya	550 ,,
Come to Malaya	120 ,,
Pineapple Recipes	Several thousand
Penang Information Guide	144 copies
Singapore Harbour Board	42,000 ,,
Working of Tin Dredge	Several thousand

The demand for the literature was satisfactory.

The publications offered for sale were:—

Handbook to British Malaya
Penang View Album
Willis' Guide to Singapore.

As was the experience at the Wembley Exhibition, there was little demand for priced books and sales were disappointing; this was no doubt due to the fact that throughout the Exhibition there was an abundance of free literature available.

MALAYAN AGRICULTURAL TRADE IN 1938

BY
D. H. GRIST,
Agricultural Economist.

Prices.

The review of Malayan agricultural trade in 1937* recorded improvement in market prices of practically all the agricultural products of Malaya. Prices, which were sharply on the up-grade during the latter part of 1936, continued to improve during the first half of 1937, but during the latter half of that year there was a retrograde movement and the year ended with prospects far less encouraging than they were earlier in the year.

Prices of all commodities in 1938 failed to recover from the low prices recorded for the second half of the previous year, while for many agricultural products the market showed a further steady decline during the year under review. This was most marked in the following export industries:—copra, oil palm products, pineapples, sago, tapioca, and derris, as is seen by the comparisons given in Table I.

Table I.
Comparative Prices in 1937 and 1938 of certain Agricultural Products for Export.

Average Price	Copra Sundried per picul	Palm Oil per ton	Palm Kernels per ton	Pine-apples per case	Sago per picul	Tapioca per picul	Derris per picul
	$	£ s. d.	£ s. d.	$	$	$	$
Jan.-June 1937 ...	7.61	25 9 2	14 8 11	3.08	5.45	5.86	47.00
July-Dec. 1937 ...	5.30	19 5 9	10 19 10	2.97	5.03	5.15	34.00
Jan.-June 1938 ...	3.38	14 18 8	9 8 11	2.68	3.90	4.24	23.67
July-Dec. 1938 ...	3.30	13 9 0	8 7 11	2.89	3.67	4.08	19.67

The average annual prices of the more important agricultural products are given in Table II, which further emphasises the 1938 depression.

The position of industries subject to some form of control is to be noted. Rubber, subject to International Rubber Regulation, cannot be said to have experienced a satisfactory year. The severity of restriction in this industry militates against low costs of production, while the burden of maintaining large untapped areas further raises costs.

* *Malayan Agricultural Journal,* Vol. XXVI, No. 5, 1938.

Table II.

Average Annual Market Prices in Singapore of Agricultural Products.

Year	Rubber per lb.	Copra per picul	Coconut Oil per picul	Palm Kernels per ton	Palm Oil per ton	Gambier per picul	Sago per picul	Tapioca per picul	Nutmegs per picul	Pepper per picul	Are-canuts per picul	Pine-apples per case
	cents	$	$	£ s. d.	£ s. d.	$	$	$	$	$	$	$
1929	34.63	9.45	16.69	28 6 3	18 4 3	14.69	7.98	6.27	46.60	57.31	9.10	
1930	19.15	7.81	14.35	23 7 2	13 5 5	15.30	6.56	4.73	31.03	33.56	8.95	
1931	9.82	5.09	9.69	18 18 3	10 7 7	17.39	5.01	3.59	23.02	20.39	6.75	
1932	6.97	5.74	10.04	17 18 9	11 1 3	14.83	4.25	3.23	24.78	20.44	5.62	3.34
1933	10.21	3.90	7.70	16 0 3	8 16 4	7.70	4.17	4.35	20.50	14.49	6.50	3.11
1934	20.63	2.94	5.96	12 9 3	6 12 8	7.76	3.92	4.13	23.41	16.33	6.50	3.10
1935	20.35	4.54	9.13	19 19 8	8 13 9	10.53	3.86	4.38	29.40	12.37	6.74	3.47
1936	27.04	5.81	11.96	19 18 2	11 0 11	10.30	4.10	5.50	29.62	8.36	6.83	3.29
1937	32.09	6.45	11.13	22 3 4	12 14 5	15.71	5.24	5.15	34.77	9.91	7.71	3.02
1938	24.39	3.53	7.53	14 3 10	8 19 3	15.34	3.78	3.16	31.15	8.24	7.64	2.79

Tea production in Malaya, subject to the International Tea Agreement, made progress, and the price in the open market, undoubtedly the result of restrictive measures, enabled producers to make a fair profit.

The Malayan pineapple canning industry experienced a trying year, but the measure of control of production and sales made possible by the formation during the year of a Central Board of Pineapple Packers has already resulted in improved market conditions.

The other crops grown in Malaya compete with similar products in an open and unrestricted market, and in the absence of well organized control of production and marketing it is unlikely that any improvement may be expected while international trade is affected by political uncertainties as are now being experienced.

Crop Production.

The crops considered under Malayan agricultural trade may be conveniently considered under three heads—crops for internal consumption, export products, and the preparation for market of products from neighbouring countries. The crops included in this review are those grown in Malaya and also crops which at least theoretically, although perhaps not economically, might be grown in this country. For instance castor oil, which cannot be grown economically in Malaya, is included, while wheat, a temperate climate crop is excluded.

Crops for Local Consumption.

The chief crop under this heading is rice; vegetables, fruits, coffee and tobacco are also grown entirely for local consumption. In addition, there are crops grown for local markets, the surplus being exported. Chief amongst such crops are coconut products and arecanuts. With the exception of rice, for which reasonably accurate figures of production and consumption are available, the total yield and local consumption of the other products mentioned above are not known with any degree of accuracy.

The production of rice in Malaya in the 1937-38 season amounted to 299,190 tons from an area of 726,670 acres. Both area and yield were below those recorded for the previous year, due mainly to an unfavourable season. The price paid for padi at mills was higher than during 1937, while the market price of rice was lower. The lower price of rice was particularly welcome to those engaged in agricultural pursuits who suffered from the lower prices obtained for their produce.

Local production supplied only 33 per cent. of rice requirements, net imports amounting to 612,394 tons. Total consumption of rice was 911,584 tons, as compared with 892,297 tons in 1937, and was the largest on record.

The value of Malayan production of rice in 1938, based on the average wholesale price of Rangoon rice in Singapore, was $18,800,000, or $2,200,000 less than in 1937.

Vegetables and fruits are grown in large quantities, the demand being further satisfied by large imports from neighbouring countries. Vegetable cultivation is almost entirely in the hands of the Chinese, but Malays are mostly responsible for the fruits. There is a growing realization amongst both Malays and Chinese of the profits which may be obtained from fruit cultivation. Interest in improved planting material and greater care in cultivation are evident.

Locally-grown coffee finds a ready market in Malaya, and is retailed in tins either as a Malayan coffee or blended with imported coffee.

Tobacco cultivation continues to be a popular crop in certain districts. The leaf, though of indifferent quality, finds a steady market at a remunerative price to the producer. It is used mainly for the manufacture of very cheap cheroots for sale amongst the labouring classes.

Export Crops.

The principal export crops are rubber, coconut products, canned pineapples, oil palm products and arecanuts. Amongst other export crops are tea, tapioca, sago, gambier, derris, and spices.

Rubber.—The production of rubber in 1938 totalled 360,898 tons, as compared with 503,127 tons in 1937; 512 tons were consumed locally by manufacturers of rubber goods.

The production of rubber was restricted under the terms of the International Rubber Regulation Agreement. Malaya's quota was 602,000 tons, the average release for the year being but 55 per cent. of the quota. The area of small holdings out of tapping increased steadily, owners finding it as profitable to sell their coupons as to produce rubber owing to the narrow margin between the price of rubber coupons and that of couponed rubber.

Coconut Products.—Net exports of copra were 68,754 tons, coconut oil 49,140 tons, fresh coconuts 8,350 tons. The copra equivalent of these exports was 150,944 tons, as compared with 142,110 tons copra equivalent in 1937. Copra exports declined in 1938, but exports of oil increased. The total value of net exports of coconut products was $11,750,000 as compared with $17,760,000 in 1937.

The difficulties which confronted producers of oil palm and coconut products were realized by Government, and the reduction of quit rent and the removal of export duty on copra and coconuts continued in force.

Oil Palm Products.—Exports of palm oil increased by over 4,000 tons to a total of 54,377 tons, and palm kernels by 2,000 tons to a total of 9,359 tons. The increased exports are on account of new areas coming into bearing and natural increase in mature areas. While exports increased in quantity their value decreased, being $6,752,000 as compared with $7,120,000 in 1937.

Pineapples.—Reference has already been made to the introduction of control within the canned pineapple industry. In the first half of the year large stocks accumulated both in Malaya and in consuming countries. Prices were accordingly depressed, a position rendered more acute by competition between local canners. A Central Board of Pineapple Canners was formed in October with the object of controlling production and selling price, and there is every hope that the Board may achieve its objects and bring a return of reasonable prosperity to the industry.

The area under pineapples decreased. Exports of canned pineapples amounted to 73,169 tons as compared with the record figure in 1938 of 80,504 tons; 1938 exports were valued at approximately $7,263,000 or $1,563,000 less than in 1937.

Tea.—A detailed report of the Malayan Tea Industry in 1938 was given in the last number of the *Malayan Agricultural Journal.* Total production was estimated to have been 1,467,000 lbs., of which 684,624 lbs. were sold locally. Net imports of tea were 3,465,900 lbs., and total consumption in Malaya was 4,150,540 lbs.

Satisfactory prices were realized on the London market for Malayan grown tea, 747,303 lbs. being sold at prices which compared favourably with those obtained for tea from countries with similar tea-growing conditions.

Arecanuts.—Net exports at 33,769 tons showed an increase over the previous year of 3,685 tons, while in value 1938 net exports were $504,253 greater than in 1937. Thus, while prices in the year under review were lower than the previous year, the expansion of the industry compensated for decreased values.

The remainder of the export crops call for little comment; tapioca net exports decreased slightly, while sago net exports fell from 10,981 tons in 1937 to 3,652 tons in 1938. Gambier exports and values continued to decline. The derris market was uncertain and prices militated against the expansion of the cultivation of this crop.

Trade in Principal Export Products.

Table III shows the trade in the chief products and also the value of the entrepôt trade, especially in rubber, coconut products, arecanuts, sago and pepper. Much of this trade is concerned in the conditioning and grading of the products to render them suitable for the world's markets. This trade declined in comparison with the previous year, due in large measure to the general unsatisfactory trade conditions.

In the case of rubber the decrease is due to the much smaller amount of wet rubber now imported into Singapore from the Netherlands Indies for the manufacture of sheet rubber. Formerly, this was a thriving industry in Singapore but now the bulk of this native rubber is conditioned in the country of origin.

Table III.

Imports and Exports of certain Agricultural Products 1938.

Product	Imports		Exports		Net Exports	
	Tons	Value $	Tons	Value $	Tons	Value $
Rubber ...	156,101	74,330,170	526,911	272,980,376	370,810	198,650,206
Coconut Products ...	118,662	6,902,842	243,667	18,418,085	125,005	11,515,243
Pineapples ...	1	407	73,169	7,262,851	73,168	7,262,444
Oil Palm Products ...	163	18,700	63,899	6,769,890	63,736	6,751,198
Arecanuts ...	55,420	5,607,979	89,189	10,445,751	33,769	4,837,772
Tapioca ...	8,143	531,436	23,869	1,608,096	15,726	1,076,660
Sago ...	46,059	1,592,853	49,711	2,578,422	3,652	985,569
Gambier ...	2,393	467,829	4,026	882,237	1,633	414,408
Derris ...	88	31,988	764	338,789	676	306,801
Pepper ...	8,003	1,494,790	7,627	1,534,674	— 376	+ 39,884

— Excess of imports over exports.

Table IV.

Annual Net Imports and Exports of Agricultural Products, Malaya.

Year.	Net Imports*		Net Exports† (excluding rubber		Excess of Imports over Exports (excluding rubber)		Net Exports of Rubber		Excess of Total Imports over Exports	Excess Value of Exports over Value of Imports
	Quantity Tons	Value $	Quantity Tons	Value $	Quantity Tons	Value $	Quantity Tons	Value $	Tons Quantity	Value $
1923	643,000	101,600,000	206,600	43,100,000	436,400	58,500,000	181,700	227,200,000	254,700	168,700,000
1924	694,600	118,400,000	219,000	51,600,000	475,600	66,800,000	152,500	189,900,000	323,100	123,100,000
1925	744,800	133,100,000	218,700	48,600,000	526,100	84,500,000	161,800	519,000,000	364,300	434,500,000
1926	857,300	157,400,000	225,800	50,000,000	631,500	107,400,000	243,400	547,500,000	388,100	440,100,000
1927	956,000	167,400,000	207,500	42,700,000	748,500	124,700,000	190,700	351,400,000	557,800	226,700,000
1928	921,400	158,900,000	230,700	44,900,000	690,700	114,000,000	260,100	262,900,000	430,600	148,900,000
1929	1,004,500	171,700,000	254,700	44,000,000	749,800	127,700,000	418,000	353,700,000	331,800	226,000,000
1930	1,022,300	150,800,000	244,100	37,800,000	778,200	113,000,000	421,000	199,600,000	357,200	86,600,000
1931	883,200	92,100,000	241,200	26,700,000	642,000	65,400,000	393,600	99,300,000	248,400	33,900,000
1932	737,800	74,200,000	253,500	29,000,000	484,300	45,200,000	386,000	68,100,000	98,300	22,900,000
1933	770,000	66,700,000	265,700	25,600,000	504,300	41,100,000	445,700	101,400,000	58,600	60,300,000
1934	871,200	78,700,000	272,800	23,400,000	598,400	55,300,000	465,800	207,900,000	132,600	152,600,000
1935	885,100	81,100,000	314,500	40,000,000	750,600	41,100,000	415,700	191,100,000	154,900	150,000,000
1936	991,900	87,100,000	311,400	36,700,000	680,500	50,400,000	352,300	208,500,000	328,200	158,100,000
1937	1,081,200	103,200,000	328,500	42,500,000	752,700	60,700,000	468,200	341,200,000	284,500	280,500,000
1938	1,110,700	102,900,000	325,300	33,700,000	785,400	69,200,000	370,800	198,700,000	414,600	129,500,000

* Imports include coir cordage and fibre, mats and matting, padi and rice, coffee, tea, kapok, mace and nutmegs, pepper, ginger, groundnuts and groundnut oil, sugar, tobacco, vegetables, livestock for food, meat, leather goods, milk, butter, poultry and eggs, feeding stuffs for animals, ataps, cloves, castor oil, gingelly seed and oil, fruits, citronella oil and flowers.

† Exports include rubber seed, coconut products, palm oil and kernels, canned pineapples, arecanuts, sago, tapioca, derris root, hides and skins, gambier, patchouli leaves and oil, mace and nutmegs, pepper and gambier.

The Value of Malayan Agricultural Trade.

The gross agricultural trade of Malaya in 1938 amounted to 3,125,000 tons, valued at $565,744,000, as compared with 3,249,000 tons, valued at $875,000,000 in 1937, 2,998,000 tons valued at $609,000,000 in 1936 and 2,958,000 tons, valued at $533,000,000 in 1935. Thus, the volume of trade has been maintained under the difficult conditions obtaining, although the values show a considerable decline.

Net exports of agricultural products, excluding rubber, were 325,302 tons, valued at $33,747,917, as compared with 328,503 tons in 1937 the highest on record, which were valued at $42,470,051.

Adding net exports of rubber, the figures become:—

1935	...	730,127	tons	valued at	$231,176,882
1936	...	663,701	,,	,, ,,	$245,218,982
1937	...	796,692	,,	,, ,,	$383,653,226
1938	...	696,112	,,	,, ,,	$232,398,123

Reference is invited to Table IV in which are shown the annual imports and exports of agricultural products for the past 16 years. The chief import product is rice and the chief export product rubber; omitting these products, imports exceeded exports by 173,035 tons, but the value of exports exceeded imports by $28,765,155. Malaya thus draws on other countries to a large extent for many products for internal consumption, as is shown by the following net import figures of the more important:—rice 612,394 tons, valued at $40,433,064; tobacco 5,903 tons, valued at $15,415,000; milk to the value of $9,132,000, sugar 122,681 tons valued at $8,766,000, vegetables $4,987,000, fruits $3,909,000, groundnuts and groundnut oil $3,407,000, livestock and meat $4,768,000.

The excess of total agricultural imports over exports was 414,619 tons, the highest since 1928. The excess value of agricultural exports over imports was $129,452,987, as compared with $280,486,330 in 1937, and the lowest figure since 1933.

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CONDITIONS ON RUBBER SMALL HOLDINGS IN MALAYA

1st Quarter, 1939.

Prepared by the Economics Branch of the Department of Agriculture, S.S. and F.M.S., in collaboration with the Field Branch of the Department.

Rainfall.

The quarter as a whole was a very dry one, the normal short dry season being more pronounced than usual in certain localities. In Mersing District, Johore, January was exceptionally wet, and in Kelantan, monsoon conditions continued during the first half of the month; elsewhere the month was about normal. February was an exceptionally dry month throughout the Peninsula, except in Kulim, Kedah, where abnormal rains were recorded. March was exceptionally dry in Mersing, Johore, and in Malacca very dry weather was experienced until the last week of the month. Elsewhere the month was normally wet.

Prices.

Prices of small-holding rubber remained fairly steady throughout the quarter and are shown in Tables I and II.

Coupon values remained high, the price per picul equivalent ranging from $26 to $29; in Parit, Perak, the price rose to $30. Uncouponed rubber was correspondingly low; in Penang and Kedah it was sold at $5 to $6, and in Selangor at $7 per picul.

Production.

Production figures for small-holding rubber are given in Table III, and the low figures for the quarter reflect both the low quota release and the further increase in holdings out of tapping referred to elsewhere in this article. Of the total amount of rubber produced during the quarter, 78,762 tons, estates of under 100 acres contributed only 31 per cent., although such estates represent 39 per cent. of the total area planted with rubber in Malaya.

Quality of Rubber.

The Kelantan report reviews the efforts made in recent years to improve the quality of small-holding rubber. The following is an extract from the report:—

> " The elimination of lump rubber is now, practically speaking, completed. This follows two years of intensive demonstration and propaganda aided by market conditions. In addition to teaching the raiat to make sheet, it has been necessary to afford considerable assistance in the way of loans for the purchase of equipment for sheet manufacture.

Table I.

Highest and Lowest Rubber Prices Paid by Local Rubber Dealers.

(In Straits dollars per picul of 133 1/3 lbs.)

1st Quarter 1939.

	Penang	Perak	Selangor	Negri Sembilan	Pahang	Malacca	Kedah	Johore
			JANUARY					
Smoked sheet	37.00-32.00	35.20-30.00	36.60-32.00	35.30-30.00	35.00-31.00	35.50-32.50	35.50-32.00	39.90-31.00
Unsmoked sheet	36.00-31.50	34.50-29.00	34.60-29.00	34.00-28.00	33.80-30.00	34.00-30.00	33.50-28.20	39.30-30.00
Scrap	29.50-23.00	26.00-24.00	29.00-27.00	—	—	29.00-26.00	29.00-24.50	30.50-26.00
			FEBRUARY					
Smoked sheet	37.00-32.50	35.70-26.20	36.00-31.50	35.50-31.00	35.00-31.00	36.00-34.50	35.70-32.00	34.00-30.00
Unsmoked sheet	36.00-32.00	34.00-25.50	33.50-30.00	34.50-30.00	33.60-29.60	35.00-32.50	33.50-28.40	33.00-28.80
Scrap	30.00-23.00	28.00-27.00	29.40-25.00	—	—	29.50-28.00	30.00-25.00	30.00-25.50
			MARCH					
Smoked sheet	38.00-34.00	36.40-30.00	36.40-32.80	36.50-32.00	36.25-31.00	36.00-33.00	36.20-32.00	36.20-30.00
Unsmoked sheet	37.00-32.50	35.00-29.00	34.40-30.00	36.00-31.00	34.00-30.00	34.00-32.00	33.00-28.30	35.30-29.75
Scrap	29.00-22.50	28.00-27.00	—	—	—	30.00-28.50	30.50-24.60	31.00-26.50

Table II.

Mean of Highest and Lowest Rubber Prices Paid by Local Dealers at a number of Centres in each State.

(In Straits dollars per picul of 133 1/3 lbs.)

1st Quarter 1939.

	Penang	Perak	Selangor	Negri Sembilan	Pahang	Malacca	Kedah	Johore
			JANUARY					
Smoked sheet	36.75-32.50	34.64-32.79	34.83-32.97	34.65-32.00	33.97-31.97	34.50-33.33	35.00-33.38	34.58-32.12
Unsmoked sheet	35.18-31.88	32.82-30.82	32.77-31.13	32.94-30.40	31.93-30.67	33.00-31.17	32.12-29.92	33.71-31.14
Scrap	27.83-26.50	26.00-24.00	29.00-27.00	—	—	28.33-26.83	28.67-26.50	29.04-27.70
			FEBRUARY					
Smoked sheet	37.75-32.75	34.40-31.94	34.77-32.92	34.50-31.94	32.87-31.90	35.67-34.83	35.05-33.00	32.93-30.93
Unsmoked sheet	34.88-32.00	32.98-29.40	32.60-31.25	33.30-30.40	31.82-30.12	34.00-33.17	32.75-30.35	32.30-29.98
Scrap	28.00-26.67	28.00-27.00	29.40-25.00	—	—	29.00-28.17	29.83-26.83	28.90-27.69
			MARCH					
Smoked sheet	37.45-34.75	35.50-32.59	35.13-33.60	35.30-33.00	35.88-32.52	35.50-33.83	34.98-32.85	34.54-31.72
Unsmoked sheet	36.12-32.88	33.77-29.98	32.73-31.05	34.60-31.60	32.86-30.80	33.83-32.50	32.05-29.92	34.15-30.77
Scrap	27.33-25.50	28.00-27.00	—	—	—	29.83-28.83	29.33-26.53	30.67-29.13

Table III.

Production of Rubber on Small Holdings.

(in tons)

	Total 1938	1st Quarter 1938	1st Quarter 1939
Federated Malay States ...	54,330	17,967	10,875
Unfederated Malay States ...	50,442	16,749	11,450
Straits Settlements ...	9,906	3,298	2,123
TOTAL MALAYA ...	114,678	38,014	24,448

Propaganda and demonstration work are now being directed towards the production of better quality sheet. The greater proportion of producers still use alum as a coagulant, padi straw and coconut shells for sieving purposes, coconut shells for latex collection and rubber leaves for spouts; thus it is going to mean a good deal of work to effect a real improvement, but as long as the economic factor remains favourable the progress already achieved by the virtual elimination of lump is expected to continue. Considerable progress has already been made as far as the use of suitable sieves and acid coagulant are concerned while interest in the use of latex cups is now growing.

Efforts are also being directed to encourage the manufacture of smoked sheet, and some 20 cabinets of the Rubber Research Institute type have been built during the past few months, most of them being of medium size and not the small cabinet size and some of them being built and worked co-operatively. The premium obtained for smoked over unsmoked sheet is at present in the vicinity of $2 to $2.50 per picul. This is sufficient to maintain interest and no more. ''

Efforts to encourage small-holders to produce good quality sheet are seriously hampered by the difficulty experienced in marketing such sheet at a price which justifies the extra labour involved. The Pahang price grading scheme, which has worked successfully in recent years, was introduced in Kinta and Lower Perak at the beginning of the year, but many small dealers have not yet complied with the new regulations. In Perak South several smoke cabinets have been in regular use throughout the quarter and one new cabinet, of 8 piculs capacity, was erected and used by the owner and other small-holders in the vicinity.

Table IV.

Estimated Acreage of Tappable Rubber which was out of Tapping on Holdings of less than 100 Acres at the end of March, 1939.

PERAK				SELANGOR				NEGRI SEMBILAN				PAHANG			
District	Total Tappable area	Total area untapped	Percentage	District	Total Tappable area	Total area untapped	Percentage	District	Total Tappable area	Total area untapped	Percentage	District	Total Tappable area	Total area untapped	Percentage
Batang Padang	36,187	11,600	32	Klang	16,143	11,300	70	Seremban	23,639	21,700	92	Raub	10,534	8,400	80
Kinta	38,874	10,100	26	Kuala Langat	23,881	15,500	65	Tampin	21,896	17,500	80	Kuala Lipis	15,457	5,100	33
Kuala Kangsar	92,166	61,800	67	Ulu Langat	45,012	16,700	37	Kuala Pilah	31,832	19,100	60	Bentong	12,224	2,800	23
Upper Perak	15,590	10,000	64	Ulu Selangor	31,463	13,200	42	Jelebu	9,097	1,600	18	Other Districts†	40,373	19 500	42
Larut & Selama	43,132	6,900	16	Kuala Lumpur	20,277	13,600	67	Port Dickson	11,133	10,200	92				
Krian	9,408	8,700	93	Kuala Selangor†	8,417	4,300	51								
Lower Perak*	26,735	17,900	67												
Dindings	9,873	8,000	81												
	271,965	135,000	50		145,193	74,600	51		97,597	70,100	72		84,588	35,800	42

MALACCA				PENANG & P. WELLESLEY				SINGAPORE			
District	Total Tappable area	Total area untapped	Percentage	District	Total Tappable area	Total area untapped	Percentage	District	Total Tappable area	Total area untapped	Percentage
Central	14,093	9,400	67	North	3,549	2,600	72	Singapore	20,115	600	3
Alor Gajah	30,838	17,300	56	Central	10,785	5,900	55				
Jasin	25,286	8,100	32	South	8,936	6,700	75				
				Penang	15,822	1,300	8				
	70,217	34,800	50		39,092	16,500	42		20,115	600	3

JOHORE	350,007	70,000	20
KEDAH	102,126	60,300	59
PERLIS	2,916	34,400	42
KELANTAN & TRENGGANU	49,133 / 29,836		

The percentage of areas out of tapping in December, 1938, was as follows:—Perak 45, Selangor 45, Negri Sembilan 67, Pahang 29, Malacca 45, Penang and Province Wellesley 35, Singapore 4, Johore 21, Kedah 42.

* Estimated from percentage for Kuala Kangsar.

†Estimated from percentage for other Districts in the State.

‡Estimated from percentage for rest of Malaya.

In Pahang a second co-operative smoke house has been erected, and also a small number of the cheaper type, although the report from this State indicates a tendency towards unsmoked sheet except in the case of Kuantan where practically all rubber is smoked before sale. The report points out that the complete abandonment of cabinets is precisely what dealers in many districts would prefer, and their continued existence, even though not in use, forces up the price of unsmoked sheet and provides a better income to small-holders.

General Condition of Holdings.

Sanitation on many holdings still leaves much to be desired, but, generally, conditions of upkeep are satisfactory. Slashing of undergrowth in preparation for inspection, is mentioned in several reports and in some districts has been too frequent for fear of a reduced coupon allowance. Certain small-holders have gone even further, and on hillsides where the soil should not be disturbed, have resorted to digging and virtually clean weeding. "Wintering" was general throughout the quarter.

Tapping.

Tables IV and V tabulate the result of the quarterly survey, the latter table providing comparison with last year's figures, from which it will be seen that there was a further increase in the area of holdings out of tapping. At the end of March it was estimated that 42 per cent. of holdings were out of tapping, as compared with 36.4 per cent. at the end of 1938.

There were several factors accounting for this big percentage of untapped holdings. "Wintering" and the incidence of the padi harvest were largely responsible in many districts, but the low coupon issue and the high value of coupons were probably the most important reasons. Sufficient rubber to cover coupons could be obtained in the first month of the quarter, or alternatively coupons would be sold in preference to producing the rubber covered by them.

Table V.
Comparisons of Areas of Rubber Small Holdings Out of Tapping.

	March, 1938		December, 1938		March, 1939	
	Acres	Percentage	Acres	Percentage	Acres	Per-centage
F.M.S. ...	189,000	31.5	264,900	44.2	315,500	52.6
S.S. ...	28,900	23.1	46,100	35.6	51,900	40.0
U.M.S. ...	117,200	21.8	147,900	27.7	164.700	30.8
Malaya ...	335,100	26.9	458,900	36.4	532,100	42.0

Planting.

Most reports indicate considerable interest in the possibility of planting new areas with rubber. In Johore numerous applications were received for permission to remove existing crops to plant rubber, but the majority of these applications, after inspection, were refused. In other parts of the country, on the other hand, little, if any, new planting has yet taken place, and replanting holds no attraction for the small-holder, who hesitates to cut down existing sources of revenue.

In Perak approximately 2,500 acres have been taken up for new planting in one district alone, and the Pahang report also mentions the cutting out of several lots for replanting in Raub and Bentong, and that nurseries for budding have been laid down. Applications for conversion of old *tenggala* padi land have been numerous in the riverine mukims. There have been many enquiries about clonal seed, but budgrafting is being recommended as far as possible, as it may be difficult later for a small-holder to prove satisfactorily that he has used clonal seed.

In Penang and Province Wellesley a total of 150 applications for replanting have been approved. The average size of the holding to be newly planted is 2 to 3 acres.

There was a brisk trade during the quarter in share certificates and prices rose considerably, probably due to the fact that their validity expired on the 31st March. Each certificate gave the right to plant 1/20th acre of rubber trees. In January, certificates were sold at $3 each in some parts of the country, but the price fell sharply by the end of the quarter to $1.50.

Pests and Diseases.

Mouldy Rot (*Ceratostomella fimbriata*) was again prevalent following heavy rains, but the dry weather of February helped considerably in its control. The Department distributes considerable quantities of approved fungicides for the control of this disease, but many small-holders revert to the use of tar in spite of the advice constantly given.

Mild outbreaks of *Oidium Heveae* were reported during refoliation period, and root diseases also were reported from various parts of the country. The report from Perak South draws attention to root diseases, and states that, in a quarterly count made in February on the rate of spread, on six 1 acre plots, six trees, apparently healthy in November, showed aerial symptoms of attack. Unfortunately, almost without exception, control measures are neglected by small-holders.

In Pahang giant snails caused damage to young nurseries, and "Meta" fuel was used for their control.

Economic Position of Small-Holders.

There is little to add under this heading to the comments in earlier reports. The low quota release offsets the slightly higher prices ruling, and the large area out of tapping has resulted in an increase of unemployment amongst tappers. A Johore

report states that it is noticeable that more attention is being given to padi planting. It is said that the absence of alternative employment is responsible for this in a small measure, but that the European crisis has had its effect, as small-holders have been advised that the price of rice will rise if war breaks out.

There is a big demand for tappers in Siam and many tappers from Kelantan have gone to work there.

The Pahang report mentions that as a result of the visit to Temerloh of H.H. the Sultan and his advice to small-holders numerous applications have been received for *kampong* land and land for mixed cultivation.

Departmental.

FROM THE DISTRICTS.

Compiled by the Chief Field Officer from Monthly Reports of Agricultural Officers.

April, 1939.

The Weather.

April over the greater part of Malaya is usually a wet month. The north-east coastal areas, *i.e.* Kelantan, Trengganu and the east part of Pahang are affected by the North-East Monsoon, and the seasons in these districts, therefore, differ from those obtaining in other parts of the country. At the different recording stations in Kelantan the annual average rainfall for April ranges between 1.44 and 4.18 inches. This year conditions have been most unseasonable and 19.08 inches of rain were recorded at Bachok and only slightly less at other stations.

In Kedah and Penang precipitation was somewhat below normal; Central Kedah was definitely dry.

In Selangor, Negri Sembilan and Pahang a normal amount of rain fell and conditions generally were seasonable. The coastal districts of Selangor experienced heavy rain and some floods occurred locally. In Malacca conditions were very dry.

The whole of Johore and Singapore experienced heavy rain and storms and the total precipitation for the month exceeded the average at all centres.

Crop Reports.

Rubber.—Rubber prices fluctuated slightly but the general level remained unchanged. Although wintering is now over there has been no appreciable increase in tapping.

In Perak it is reported that the distribution amongst small-holders of notices on replanting of rubber is having the desired effect. Small-holders are now becoming more familiar with the regulations governing planting and replanting. Enquiries previously had shown that people in the more rural areas were in some instances entirely ignorant of these rules. Two hundred people attended a lecture on this subject given by the Asiatic Rubber Instructor.

In most States the difference in price between smoked and unsmoked sheet continues to be small. While this position continues instruction by Asiatic Rubber Instructors in the matter of the production of high-quality smoked sheet has little chance of making headway.

Kelantan dealers still pay a fair premium for good quality smoked sheet; the price differentiation between smoked and unsmoked sheet per picul is at present between $2.50 and $3. The work of the Asiatic Rubber Instructor and his assistant Demonstrators is having marked results in this State.

Padi.—Stocks have been coming in well to the Government Rice Mills, Krian, Perak, and up to the 16th April some 238,000 piculs had been bought.

Sealing of S.48 continues both at the mills and in the field; at present the mill at Bagan Serai is receiving most of this padi of which 57 per cent. is sealed in the field. At present Government Mill prices little S.48 is leaving the district, and therefore more is being sealed. Up to the 16th April 163,000 piculs, 63 per cent. of the total Krian padi bought, obtained the bonus; the corresponding figure for 1938 was 61 per cent.

A new Government rice mill similar to those already working in Krian is to be erected to deal with the padi produced in the Sungei Manik padi area. At present cultivators in this area are ensured a fair price for their padi by the operation of a Government Buying Agency. Dealers had been paying 4½ to 5 cents per gantang; the Buying Agency operated on several occasions buying at 6½ cents and later at 7 cents and the dealers were forced to bring their prices into line.

Work in connexion with the pumping scheme at the Pahang Tua-Langgar padi area in Pahang is progressing. The pumping plant has arrived and lots to an aggregate of 1,000 acres have been alienated to suitable applicants.

Derris.—Owing to the low price of the commodity most of the holdings planted with derris in Kinta and Batang Padang are now more or less abandoned, and grass and other weeds have been allowed to grow. Dealers in this locality have almost ceased to buy root. The only recent purchase of any size was a quantity of 45 piculs for which a price of only $5 to $6 per picul was paid.

It should be noted that the derris grown in this part of the country has a very low rotenone content, (*D. malaccensis*, Kinta type) and is, therefore, not acceptable to the market at the present time, particularly when the root is destined for export to America where buyers estimate toxicity solely on rotenone content.

Arecanuts.—Arecanut husk has now become a saleable commodity. In Johore the wet husk is bought by Chinese dealers who at present pay 6 cents per sack. After it has been dried, it is exported to China for making into blankets and head coverings. The total exports for the month amounted to 191 piculs.

Squirrels.

In Malacca the organized shooting of squirrels has now recommenced. The reward has been fixed at 5 cents per tail as against 10 cents in 1938. It is thought that this reduction in the reward will not militate against the success of the scheme, and that owners of fruit trees will continue to shoot squirrels on their holdings, and only those people who previously used to hunt squirrels for profit in forest and rubber land will be discouraged. The numbers so far killed are less than at the same time in 1938.

DEPARTMENTAL NOTES.

Rural Lecture Caravan.

The Rural Lecture Caravan toured Perak during March and April and visited a large number of centres. The afternoon lectures were abandoned at several centres owing to the difficulty experienced in obtaining an audience, but the evening displays of films and slides were well attended. Among the subjects dealt with through the medium of lectures and pictures are poultry keeping, plant bud-grafting and fruit cultivation, padi selection, and rubber manufacture. The picture slides are explained with the help of a microphone and loud-speaker.

Leave.

Mr. B. Bunting, Acting Chief Research Officer, has been granted 184 days leave prior to retirement from 8th May to 7th November 1939 inclusive. Major C. D. V. Georgi, Senior Chemist, has been appointed to act as Chief Research Officer.

Mr. D. H. Grist, Agricultural Economist, has been granted 192 days leave from 8th May to 15th November 1939 inclusive. Mr. H. L. Barnett, Assistant to Agricultural Economist, will act temporarily as Agricultural Economist.

HILL PADI IN TRENGGANU.

In the *Malayan Agricultural Journal* Vol. XXVII, No. 2, page 52, it is stated that hill padi (*padi huma*) is grown extensively in the Jajahan Timor of Trengganu. This statement was based on a report on Agriculture in Trengganu published in this Journal in April, 1934. The Commissioner of Lands and Mines, Trengganu, states that *padi huma* is no longer grown extensively in the Jajahan Timor or Trengganu.

Statistical.

MARKET PRICES.

April 1939.

Major Crops.

Rubber.—Daily quotations remained relatively steady throughout the month though at a lower level than in March. No. 1 X. Ribbed Smoked Sheet, loose, opened at 27⅛ cents per lb. and closed at 27⅜ cents. The average of daily quotations was 27.22 cents per lb., as compared with 28.11 cents per lb. in March. The London average quotation per lb. was 7.93 pence and New York 15.78 cents gold, as compared with 8.14 pence and 16.21 cents gold in March.

Prices paid for small-holders' rubber at three centres during the month are given in Table I.

Table I.

Weekly Prices Paid by Local Dealers for Small-Holders' Rubber, April, 1939.

(Dollars per picul of 133 1/3 lbs.)

Grades	Kuala Kangsar, Perak				Kuala Pilah, Negri Sembilan			Batu Pahat, Johore.			
	5	12	19	26	6	13	20	5	12	19	26
Smoked Sheet ...	34.00	33.50	33.00	34.00	35.00	34.00	33.40	32.20	—	33.10	—
Unsmoked Sheet ...	32.00	—	—	—	33.00	33.00	32.50	32.24	32.00	31.53	32.48
Scrap ...	No purchases										

Transport by F.M.S.R. lorry service Kuala Pilah to Seremban 12 cents per picul, to Malacca excluding duty, 25 cents per picul, by rail Seremban to Penang $1.24 per picul, Seremban to Singapore $8.00 per ton.

Transport from Batu Pahat to Singapore by lorry excluding duty, 90 cents per picul.

Transport from Kuala Kangsar to Prai by railway $6.20 per ton.

Transport from Kuala Kangsar to Singapore by railway $10.00 per ton (minimum consignment 5 tons).

At Kuala Pilah the standard deduction for moisture in unsmoked sheet is 5 per cent.

At Kuala Kangsar the standard deduction for moisture in unsmoked sheet is 10 per cent.

No purchases of rubber at Kuala Pilah on the 27th April.

Palm Oil.—There was a slight fall in prices during April as will be seen from Table II. The March averages of weekly quotations were:—palm oil £13.11.0, kernels £8.16.9.

Table II.

Prices of Palm Oil and Palm Kernels.

Date 1939.	Palm Oil in Bulk, c.i.f. landed weight Liverpool/ Halifax.	Palm Kernels, c.i.f. landed weight London/ Continent
	per ton	per ton
April 7	£ 13. 0. 0 Liverpool	£ 8. 12. 6 Rotterdam
,, 14	13. 0. 0 ,,	8. 12. 6 ,,
,, 21	13. 0. 0 ,,	8. 12. 6 ,,
,, 28	13. 7. 6 ,,	8. 12. 6 ,,
Average	£ 13. 1. 2	£ 8. 12. 6

Copra.—Prices remained at the low levels reached at the end of March, the sun-dried grade fluctuating between $3.40 and $3.55 per picul and closing at the latter figure on a rising market. The Singapore average price for the month for this grade was $3.47 per picul as compared with $3.64 in March. The mixed grade continued to be quoted at 30 cents per picul lower.

Copra cake was unchanged at $1.60 per picul.

Rice.—The Singapore average wholesale prices of rice per picul in March were as follows:—Siam No. 2 Ordinary $4.06, Rangoon No. 1 $3.17, Saigon No. 1 $3.47, as compared with $4.05, $3.07 and $3.27 in February and $4.09, $3.62 and $3.92 in March 1938.

The average retail prices in cents per gantang (gallon) of No. 2 Siam rice were: Singapore 26, Penang 32, Malacca 28, as compared with 27, 32 and 30 in February.

The average declared trade value of imports during March was $3.76 per picul, as compared with $3.68 in February and $3.78 in January.

Padi.—In Kedah, prices of padi per 100 gantangs (gallons) were between $7.50 and $7.70. In Penang and Kelantan the price was $8. In Perak the price ranged from $8 to $11 with the exception of Perak South where the range was from $6 to $13. The ranges elsewhere were: Pahang $8.50 to $11, Johore $8 to $10, Malacca $9 to $10, Negri Sembilan $7 to $13.

The Government Rice Mill at Bagan Serai, Perak, increased its price to $2.20 per picul and the other Government Mill at Parit Buntar increased its price to $2.10, with a premium at both mills of 10 cents for Seraup 48. The Government Rice Mill, Temerloh, Pahang, paid $2.20 per picul.

Pineapples.—Singapore prices of canned pineapples, per case of 48 cans of 1½ lbs. each, as fixed by the Central Board of Packers, were as follows:—G.A.Q.: Sliced Flat $3.05, Sliced Tall $3.20, Cubes $3.10; Golden $3.45, $3.60 and $3.50 respectively.

Fresh fruit prices per 100 were as follows:—Singapore 90 cents to $1.70; Selangor 58 to 80 cents; Johore, 1st quality $1 to $1.70, 2nd quality 70 cents to $1.40, 3rd quality 50 to 90 cents.

Beverages.

Tea.—During April three consignments of Malayan highland tea, comprising 208 packages, were sold on the London market at prices ranging from 1s.3¼d. to 1s.3¾d. per lb., the average being 1s.3½d. Four consignments of lowland tea, comprising 316 packages, were sold at prices ranging from 11½d. to 1s.0¾d. per lb., the average price being 1s.0.12d.

The average London prices per lb. realized for tea from other countries, according to the *Tea Market Reports* for April of the Tea Brokers' Association of London, were as follows:—Ceylon 1s.4.49d., Java 1s.3.40d., Indian Northern 1s.0.91d., Indian Southern 1s.2.95d., Sumatra 11.28d.

The latest Colombo average prices available, quoted from *The Ceylon Tea Market Report* of 25th April, 1939, of the Colombo Brokers' Association, are as follows, in rupee cents per lb.:—High Grown Teas 80, Medium Grown Teas 73, Low Grown Teas 68.

Coffee.—Liberian coffee continued unchanged at $14.50 per picul. Excelsa opened at $10.25 per picul and improved to $10.50. Robusta was quoted throughout the month at $6.50 per picul.

The average of highest and lowest quotations in Singapore for Palembang coffee was $8.85 to $10.19 per picul, and for Sourabaya coffee $11.88 to $13.75, the price within these ranges depending upon quality.

Spices.

Arecanuts.—The averages of the Singapore Chamber of Commerce quotations per picul were:—Best $6.95, Medium $6.41, Mixed $6.

The averages of the highest and lowest quotations per picul in Singapore were as follows:—Splits $4.62 to $6.65; Red Whole $5.06 to $6.80; Sliced $9.44 to $12.81; as compared with $8.25 to $12.20, $4.75 to $6.35, and $4.45 to $6.55 respectively in March.

Pepper.—Prices fell still further during the month owing to small demand. Average Singapore prices per picul were:—Singapore Black $8.12, Singapore White $12.40, Muntok White $12.65, as compared with $8.37, $13.19 and $13.49 respectively in March.

Nutmegs.—The Singapore price for both 110's and 80's continued throughout the month unchanged at $28 per picul. The March average price was $28.50. Penang dried nutmegs were sold at $19 per picul.

Mace.—Prices in Singapore remained unchanged throughout the month at the March levels: Siouw $85 per picul (nominal), Amboina $58 per picul. In Penang locally produced mace, dry, was sold at $75 per picul.

Cloves.—Singapore nominal quotations for both Zanzibar and Amboina continued unchanged at $40 per picul. Penang cloves, dried, sold in Penang at $45 per picul.

Cardamoms.—Green cardamoms were quoted in *The Ceylon Chamber of Commerce Weekly Report* for 24th April 1939 from Rs. 1.10 to Rs. 1.24 per lb.

Miscellaneous.

Derris.—With a continued small demand prices fell slightly in April. The average price in Singapore for roots sold on a basis of ether extract was $7.50 to $9 per picul, and for roots sold on a basis of rotenone content $17.50 to $19 per picul. The March averages were $8 to $10 and $17.50 to $19.50 respectively.

Our New York correspondent, writing on the 11th April, reports that there was practically no change in the price level quoted in his January letter with the exception that 17 per cent. malaccensis was recently offered at 3⅜d. per lb., reflecting the the lack of interest in the United States in this type of root as compared with elliptica.

Gambier.—Prices of both Cube No. 1 and Block advanced by $1 per picul in the second half of the month. Average Singapore prices per picul were:—Cube No. 1 $15.40, Block $7.40 (nominal), as compared with $15 and $7 respectively in March.

Sago.—Pearl improved to $4.25 per picul to average $4.01, and Flour, Sarawak Fair, rose to $2.80, averaging $2.52 per picul. March average prices were $3.80 and $2.29 respectively.

Tapioca.—Flake Fair and Pearl Medium were unchanged at $3.85 and $4.50 per picul respectively, while Seed Pearl, improved to $4.10 at the close, averaging $3.94 as against $3.90 in March.

Tobacco.—Kelantan prices of prepared tobacco rose again and were quoted as follows, per picul:—1st quality $100 to $160, 2nd quality $75 to $128, 3rd quality $60 to $112. The general range of the three grades of dried leaf was: $15 to $40; $10 to $28; $5 to $20. In Malacca the range was $16.50 to $18.50 and in Johore $5 to $18. Prepared tobacco in Johore was quoted at $35 to $112 per picul.

The above prices are based on London and Singapore daily quotations for rubber, on the Singapore daily prices for copra, on the Singapore Chamber of Commerce Weekly Reports for the month and on other local sources of information. Palm oil reports and certain coffee prices are kindly supplied by Guthrie & Co. Ltd., Kuala Lumpur, the Singapore prices of imported coffee and arecanuts by Lianqui Trading Company of Singapore, and Singapore derris prices by Hooglandt & Co., Singapore.

1 Picul = 133 1/3 lbs. The Dollar is fixed at two shillings and four pence.

Note.— The Department of Agriculture will be pleased to assist planters in finding a market for agricultural produce. Similar assistance is also offered by the Malayan Information Agency, 57, Trafalgar Square, London, W.C.2.

GENERAL RICE SUMMARY*

March 1939.

Malaya.—Imports of foreign rice during March were 74,583 tons,† and exports 17,992 tons, net imports being 56,591 tons, as compared with 53,801 tons in 1938.¶

Of the imports during March 46 per cent. were consigned to Singapore, 22 per cent. to Penang, 6 per cent. to Malacca, 21 per cent. to the Federated Malay States, and 5 per cent. to the Unfederated Malay States. The foreign imports by countries of origin were as follows (in tons, percentages in brackets):—Siam 45,977 (61.6), Burma 24,892 (33.4), French Indo-China 2,625 (3.5), other countries 1,089 (1.5).

Of the exports during March 81 per cent. were consigned to the Netherlands Indies, and 19 per cent. to other countries. The various kinds of rice exported were as follows (in tons, percentages in brackets):—Siam 10,668 (59.3), Burma 6,847 (38.0), French Indo-China 359 (2.0), parboiled 54 (0.3), Malayan production 64 (0.4).

March net imports by countries of origin, were (in tons, percentages in brackets):—Siam 35,309 (62.4), Burma 18,045 (31.9), French Indo-China 2,266 (4.0), elsewhere 971 (1.7).

India.—Foreign exports during January and February were 36,000 tons, the same as in 1938. Of these exports 2.8 (5.6) per cent. were to the United Kingdom, nil (5.6) per cent. to the Continent of Europe, 41.7 (44.4) per cent. to Ceylon, 5.5 (5.5) per cent. to the Straits Settlements and the Far East, and 50.0 (38.9) per cent. to other countries. The percentages in brackets are for the corresponding period in 1938.

Burma.—Foreign exports from the 1st January to 29th March totalled 1,111,540 tons, as compared with 966,364 tons in 1938, an increase of 15 per cent. Of these exports 58.9 (44.8) per cent. were to India, 6.2 (9.5) per cent. to the United Kingdom, 5.6 (6.0) per cent. to the Continent of Europe, 9.8 (12.0) per cent. to Ceylon, 8.7 (14.2) per cent. to the Straits Settlements and the Far East, and 10.8 (13.5) per cent. to other countries. The percentages in brackets refer to 1938.

Average March prices of rice in rupees per 100 baskets of 75 lbs. each at Rangoon were:—Big Mills Specials 206, Small Mills Specials 210.

Siam and Japan.—The latest information available was published in the February Summary.

French Indo-China.—Entries of padi into Cholon during the first quarter of the year totalled 604,193 tons, as compared with 412,694 tons in 1938, an increase of 46.4 per cent. Exports of rice during the same period were 457,087 tons, as compared with 405,519 tons in 1938, an increase of 12.7 per cent.

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* Abridged from the Rice Summary for March 1939 compiled by the Department of Statistics, Straits Settlements and Federated Malay States.

† Ton = long ton (2,240 lbs.)

¶ It is to be understood throughout the summary that all comparisons and percentage increases or decreases are in relation to the corresponding period of 1938.

The February Saigon rice report states that "Difficulty experienced in obtaining padi from the interior has been illustrated by an extraordinary accumulation of chartered tramps in the port of Saigon, where for some time not a single berth was unoccupied. Prices have naturally been influenced by the prevailing scarcity of stocks."

The price of rice rose from $2.59 to $2.73 per picul, and of padi from $1.60 to $1.73 per picul.

The Netherlands Indies.—The yield of the native rice crop in Java and Madoera for 1938 was estimated at 3,875,897 tons, an increase of 3.9 per cent. as compared with the actual 1937 crop of 3,729,980 tons.

The area harvested in Java and Madoera during 1938 was 9,763,910 acres, an increase of 2 per cent. when compared with the 1937 area of 9,568,780 acres.

Imports into Java and Madoera during 1938 totalled 22,148 tons, and into the Outer Provinces 305,501 tons, as compared with 8,426 and 166,383 tons respectively in 1937, increases of 162.9 and 83.6 per cent. Exports from Java and Madoera to other countries during 1938 were 7,523 tons, and to the Outer Provinces (mainly foreign rice) 75,413 tons, as compared with 16,832 and 193,992 tons respectively in 1937, decreases of 55.3 and 66.1 per cent.

Ceylon.—Imports during the first quarter were 159,912 tons as against 147,320 tons in 1938, an increase of 8.5 per cent. Of these imports 14.8 (14.4) per cent. were from British India, 64.2 (74.0) per cent. from Burma, 0.6 (0.7) per cent. from the Straits Settlements, and 20.4 (10.9) per cent. from other countries. The 1938 percentages are in brackets.

Europe and America.—Shipments from the East to Europe from 1st January to 8th March totalled 217,738 tons, as compared with 172,160 tons in 1938, an increase of 26.5 per cent. Of these shipments 40.7 (39.2) per cent. were from Burma, 46.6 (50.0) per cent. from Saigon, 11.9 (8.7) per cent. from Siam, and 0.8 (2.1) per cent. from Bengal. The 1938 percentages are in brackets.

Shipments for the Levant from 1st January to 8th March totalled 4,694 tons, as compared with 3,768 tons in 1938, an increase of 24.6 per cent. Shipments for Cuba, West Indies and America from 1st January to 9th March were 40,328 tons, as compared with 50,092 tons in 1938, a decrease of 19.5 per cent.

FERTILIZER PRICES, APRIL, 1939.

The following are the prices at the end of April, 1939, of some of the more important fertilizers.

Product.	Analysis				Price per ton $
	Nitrogen (N)	Phosphoric Acid (P_2O_5)		Potash (K_2O)	
		Soluble	Insoluble		
Sulphate of Ammonia ...	20.6	—	—	—	72.75
Calcium Cyanamide ...	20.6	—	—	—	80.00
Muriate of Potash ...	—	—	—	50	112.00
Sulphate of Potash ...	—	—	—	48	112.00
Superphosphate (concentrated) ...	—	39	—	—	105.00
Superphosphate ...	—		—	—	60.00
Basic Slag ...	—	16	—	—	48.00
Rock Phosphate (Christmas Island) ...	—	11*	38‡	—	33.50
Rock Phosphate (very finely ground Gafsa) ...	—	11*	26 - 28‡	—	40.00
Lime ...	—	—	—	—	20.00

* Citric soluble. ‡ Total

Quotations are *ex* warehouse, Port Swettenham, Klang, Singapore and Penang, with the exception of muriate of potash which is *ex* warehouse, Port Swettenham, Klang and Singapore.

The above quotations for concentrated superphosphate, superphosphate and Christmas Island phosphate are *ex* warehouse Penang, Port Swettenham and Klang. The Singapore quotations for these three fertilizers are $95, $50 and $31.50 per ton respectively.

MALAYAN AGRICULTURAL EXPORTS, FEBRUARY, 1939.

PRODUCT.	Net Exports in Tons				
	Year 1938	Jan./Feb. 1938	Jan./Feb. 1939	February 1938	February 1939
Arecanuts ...	33,769	6,881	7,857	3,797	4,147
Coconuts fresh†‡ ...	116,743†	12,011†	15,727†	6,968†	8,282†
Coconut oil‡ ...	49,140	6,892	8,631	3,834	3,783
Copra‡ ...	68,754	6,737	1,095	1,047	1,735
Copra cake ...	7,112	683	904	30	49
Gambier, all kinds ...	1,632	245	243	64	176
Palm kernels ...	9,359	1,171	2,008	475	1,010
Palm oil ...	54,377	7,259	6,619	2,765	3,293
Pineapples, canned ...	73,168	11,444	11,371	5,813	6,884
Rubber¶ ...	360,898¶	72,483¶	57,548¶	32,459¶	24,974¶
Sago,—flour ...	4,537	506	1,860	467	778
,, —pearl ...	4,203	634	436	244	249
,, —raw ...	5,088*	1,155*	526*	656*	319*
Tapioca,—flake ...	981	192	111	91	78
,, —flour ...	3,072*	606*	358*	359*	215*
,, —pearl ...	17,818	2,146	2,282	885	1,190
Derris ...	676	53	204	28	130
‡Copra equivalent ...	150,944	18,176	15,434	7,416	8,047

† hundreds in number. * net imports. ¶ production.

Malayan Production of Palm Oil and Kernels

(In long tons, as declared by Estates).

Month 1939	Palm Oil			Palm Kernels		
	F.M.S.	U.M.S.	Malaya	F.M.S.	U.M.S.	Malaya
January ...	2,402.5	2,726.3	5,128.8	429.7	502.0	931.7
February ...	2,193.4	1,693.3	3,886.7	372.9	282.0	654.9
March ...	2,453.1	2,324.8	4,777.9	437.9	394.0	831.9
Total ...	7,049.0	6,744.4	13,793.4	1,240.5	1,178.0	2,418.5
Total January to March, 1938 ...	6,641.7	4,609.4	11,251.1	1,200.9	837.0	2,037.9
Total for the year 1938 ...	28,979.0	22,087.7	51,066.7	5,158.9	3,620.0	8,778.9

Stocks on estates as at 31st March, 1939, were: palm oil 4,129 tons, palm kernels 889 tons.

Acreages of Tappable Rubber actually Tapped and not Tapped on Estates of 100 Acres and over, for the Month ending 31st March, 1939.

State or Territory	Estimated Acreages of Tappable Rubber (9)+(11)	Acreages of tappable rubber not tapped: On estates which have entirely ceased tapping — Acreage	Percentage of (3) to (2)	On estates which have partly ceased tapping (a) — Acreage	Percentage of (5) to (2)	Area of tappable rubber never been tapped (b) — Acreage	Percentage of (7) to (2)	Total area not tapped (3) + (5) (c) — Acreage	Percentage of (9) to (2)	Total area tapped during the month — Average	Percentage of (11) to (2)	Area of tappable rubber rested under rotational systems (c) — Acreage	Percentage of (13) to (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
S. S.—													
Province Wellesley ...	43,212	1,850	4.3	18,771	43.4	513	1.2	20,621	47.7	22,591	52.3	7,999	18.5
Malacca ...	120,763	7,251	6.0	35,084	29.1	2,160	1.8	42,335	35.1	78,428	64.9	24,460	20.3
Penang ...	2,480	—	—	1,131	45.6	9	0.4	1,131	45.6	1,349	54.4	60	2.4
Singapore ...	32,137	6,932	21.5	9,538	29.7	135	0.4	16,470	51.2	15,667	48.8	3,473	10.8
Total S.S. ...	198,592	16,033	8.1	64,524	32.5	2,817	1.4	80,557	40.6	118,035	59.4	35,992	18.1
F. M. S.—													
Perak ...	285,812	15,072	5.3	80,272	28.1	8,383	2.9	95,344	33.4	190,468	66.6	47,632	16.7
Selangor ...	320,036	16,812	5.2	71,242	22.3	7,337	2.3	88,054	27.5	231,982	72.5	55,607	17.4
Negri Sembilan ...	264,541	21,569	8.2	77,028	29.1	16,545	6.3	98,597	37.3	165,944	62.7	44,229	16.7
Pahang ...	86,299	7,550	8.8	26,243	30.4	6,166	7.1	33,793	39.2	52,506	60.8	10,191	11.8
Total F.M.S. ...	956,688	61,003	6.4	254,785	26.6	38,431	4.0	315,788	33.0	640,900	67.0	157,659	16.5
U. M. S.—													
Johore ...	483,320	24,046	5.0	140,671	29.1	37,781	7.8	164,717	34.1	318,603	65.9	73,197	15.1
Kedah ...	200,411	10,328	5.1	39,793	19.9	7,006	3.5	50,121	25.0	150,290	75.0	44,611	22.3
Kelantan ...	31,224	403	1.3	7,447	23.8	2,424	7.8	7,850	25.1	23,374	74.9	5,522	17.7
Trengganu (d) ...	4,817	nil	nil	49	1.0	nil	nil	49	1.0	4,768	99.0	1,651	34.3
Perlis (e) ...	1,459	458	31.4	239	16.4	155	10.6	697	47.8	762	52.2	294	20.2
Brunei ...	5,746	nil	nil	3,349	58.3	316	5.5	3,349	58.3	2,397	41.7	589	10.3
Total U.M.S. ...	726,977	35,235	4.8	191,548	26.4	47,772	6.6	226,783	31.2	500,194	68.8	125,864	17.3
Total Malaya ...	1,882,257	112,271	6.0	510,857	27.1	89,020	4.7	623,128	33.1	1,259,129	66.9	319,515	17.0

Notes.—(*a*) Area out-of-tapping on estates which have partly ceased tapping refers to areas definitely being rested and excludes areas on any tapping round.

(*b*) The acreage shown in column (7) is included in columns (3) and (5).

(*c*) Areas of tappable rubber rested under rotational systems are not considered as out-of-tapping and therefore columns (11) and (12) include columns (13) and (14) respectively.

(*d*) Registered companies only.

MALAYAN RUBBER STATISTICS Table I.

Acreage, Stocks, Production, Imports and Exports of Rubber, including Latex, Concentrated Latex and Revertex, for the month of March, 1939, in Dry Tons.

State or Territory	Stocks at beginning of month 1			Production by Estates of 100 acres and over		Production by Estates of less than 100 acres estimated 2		Imports				Exports including re-exports				Stocks at end of month			Consumption 3	
								during the month		January to March 1939		during the month		January to March 1939						
	Ports	Dealers	Estates of 100 acres and over	during the month	Jan. to March 1939	during the month	Jan. to March 1939	Foreign	From Malay States & Labuan	Foreign	From Malay States & Labuan	Foreign	Local	Foreign	Local	Ports	Dealers	Estates of 100 acres and over	during the month	Jan. to March 1939
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Malay States :—																				
Federated Malay States ...	...	5,374	27,512	8,880	28,980	1,594	10,875	Nil	Nil	Nil	Nil	11,040	381	34,362	5,154	...	3,220	28,702	17	48
Johore ...	...	2,255	10,015	4,218	12,984	1,393	7,288	Nil	38	Nil	106	2,068	3,188	7,924	11,974	...	1,844	10,819	...	...
Kedah ...	...	231	6,017	1,970	6,928	226	1,947	Nil	Nil	Nil	Nil	1,494	842	4,033	4,768	...	124	5,984	...	...
Perlis ...	...	9	36	3	25	12	53	Nil	Nil	Nil	Nil	Nil	16	Nil	77	...	9	35	...	...
Kelantan ...	...	593	639	315	882	390	1,453	Nil	Nil	Nil	Nil	333	381	736	1,464	...	442	781	...	...
Trengganu ...	...	26	313	145	355	153	553	Nil	Nil	Nil	Nil	Nil	275	Nil	886	...	3	359	...	...
Brunei ...	...	18	100	28	108	25	156	...	...	...	...	...	74	...	267	...	Nil	97	...	...
Total Malay States	...	8,506	44,632	15,559	50,262	3,793	22,325	Nil	38	Nil	106	14,935	5,157	47,055	24,590	...	5,642	46,777	17	48
S. Settlements :—																				
Malacca ...	...	1,619	2,343	822	2,737	383	1,331	Nil	6,959	Nil	26,600	1,957	Nil	6,635	Nil	...	1,322	2,471	...	...
Province Wellesley ...	...	924	1,053	236	978	149	413	Nil		Nil		6,407		18,238		...	545	986	...	...
Penang ...	1,996	3,618	14	13	44	72	180	2,910		8,940						704	2,748	8	...	...
Singapore ...	3,404	19,551	295	100	293	80	174	11,086		37,878		19,960		57,747		3,184	16,633	244	28	77
Labuan ...	...	13	Nil	Nil	Nil	7	25	39		155		Nil		Nil		...	10	Nil	...	...
Total Straits Settlements ...	5,400	25,725	3,705	1,171	4,052	691	2,123	14,035	6,959	46,973	26,600	28,324	Nil	82,620	Nil	3,888	21,258	3,709	28	77
Total Malaya ...	5,400	34,231	48,337	16,730	54,314	4,484	24,448	14,035	6,997	46,973	26,706	43,259	5,157	129,675	24,590	3,888	26,900	50,486	45	125

TABLE II
DEALERS' STOCKS, IN DRY TONS 3

Class of Rubber	Federated Malay States	S'pore	Penang	Province We'sly D'dings M'cca.	Johore	Kedah
22	23	24	25	26	27	28
Dry Rubber	2,783	16,036	2,571	1,629	1,538	68
Wet Rubber	437	597	177	248	306	56
Total ...	3,220	16,633	2,748	1,877	1,844	124

TABLE III
FOREIGN EXPORTS

PORTS	For month	Jan. to March 1939
29	30	31
Singapore ...	29,437	88,844
Penang ...	9,767	28,545
Port Swettenham.	3,893	11,776
Malacca ...	162	510
Malaya ...	43,259	129,675

TABLE IV
DOMESTIC EXPORTS 4

AREA	For month	Jan. to March 1939
32	33	34
Malay States ...	20,033	71,498
Straits Settlements	1,867	6,063
Malaya ..	21,900	77,561

Notes:—

1. Stocks on estates of less than 100 acres and stocks in transit on rail, road or local steamer are not ascertained
2. The production of estates of less than 100 acres is estimated from the formula : Production + Imports + Stocks at beginning of month = Exports + Stocks at end of month. + Consumption, *i.e.*, Column [7] = Columns [13] + [14] + [17] + [18] + [19] + [20] − [2] − [3] − [4] − [5] − [9] − [10]. For the Straits Settlements the production of estates of less than 100 acres is represented by sales or exports as shown by cess paid.
3. Dealers' stocks in the Federated Malay States are reduced to dry weights by the following fixed ratios: unsmoked sheet, 15% wet sheet, 25% scrap, lump, etc., 40%; stocks elsewhere are in dry weights as reported by the dealers themselves.
4. Columns (33) and (34) represent exports of rubber subject to regulation which, for Singapore and Penang Islands are represented by sales or exports as shown by cess paid.
5. All statements are brought up to date monthly, and any inaccuracies that may be disclosed are corrected in the totals; the latest publication therefore, is always the most reliable.
6. The above, with certain omissions, is the Report published by the Registrar-General of Statistics, S.S and F.M.S., at Singapore on 25th April, 1939

METEOROLOGICAL SUMMARY, MALAYA, MARCH, 1939.

Locality.	Air Temperature in degrees Fahrenheit							Earth Temperature		Rainfall								Bright Sunshine.		
	Means of			Absolute Extremes						Total.		Most in a day.	Number of days.					Total.	Daily Mean.	Per cent.
	A. Max.	B. Min.	Mean of A and B	Highest Max.	Lowest Min.	Lowest Max.	Highest Min.	At 1 foot	At 4 feet			Amt.	Precipitation .01 in or more	Precipitation, .04 in or more	Thunder-storm	Fog morning obs.	Gale force 8 or more			
	°F	°F	°F	°F	°F	°F	°F	°F	°F	in.	mm.	in.						hrs.	hrs.	
Railway Hill, Kuala Lumpur, Selangor ...	92.7	71.7	82.2	95	69	88	74	84.1	84.5	7.25	184.2	1.55	18	16	10	2	2	211.15	6.81	56
Bukit Jeram, Selangor ...	90.3	72.1	81.2	93	70	84	74	87.0	88.0	4.81	122.2	1.55	10	8	2	—	—	233.20	7.52	62
Sitiawan, Perak ...	89.7	72.7	81.2	92	71	87	75	83.9	84.3	7.86	199.6	1.70	15	13	3	—	—	239.10	7.71	64
Ipoh Aerodrome, Perak ...	92.0	71.5	81.7	95	69	88	74	83.6	84.1	12.50	317.5	3.26	18	16	10	—	3	225.40	7.27	61
Temerloh, Pahang ...	90.6	72.1	81.3	94	69	84	75	85.3	85.7	4.58	116.3	1.38	14	10	5	9	—	222.85	7.19	59
Kuala Lipis, Pahang ...	89.2	71.2	80.2	92	69	81	73	83.7	83.7	10.93	277.6	2.21	19	17	5	26	—	204.20	6.59	54
Kuala Pahang, Pahang ...	85.4	74.9	80.1	88	70	80	81	84.8	84.8	5.46	138.7	2.08	14	13	—	—	—	248.00	8.00	66
Kallang Aerodrome, S'pore ...	87.1	74.6	80.9	92	72	83	77	82.3	83.0	6.63	168.4	1.57	14	12	7	—	—	201.80	6.51	54
Bayan Lepas Aerodrome Penang ...	88.5	73.8	81.1	91	71	85	76	84.7	84.8	6.35	161.3	3.31	14	11	6	—	—	237.50	7.60	63
Malacca Town, Malacca ...	87.9	73.8	80.9	92	70	82	77	85.1	84.9	2.28	57.9	0.92	10	8	7	—	—	227.05	7.32	60
Kluang, Johore ...	89.4	71.1	80.3	92	69	84	73	81.3	81.6	17.63	447.8	2.80	22	19	15	9	—	195.40	6.30	52
Mersing, Johore ...	85.1	71.9	78.5	88	69	78	77	81.8	80.9	3.62	91.9	1.00	16	11	2	—	—	226.65	7.31	60
Alor Star, Kedah ...	92.5	71.7	82.1	96	69	87	75	85.5	86.1	8.23	209.0	2.14	16	16	9	1	—	256.70	8.28	68
Kota Bahru, Kelantan ...	89.2	71.0	80.1	92	66	86	74	82.6	82.9	0.72	18.3	0.22	11	5	2	3	—	263.80	8.51	71
Kuala Trengganu, Trengganu	86.5	72.1	79.3	88	69	82	77	82.8	83.5	4.57	116.1	1.64	10	9	2	5	—	272.40	8.79	73
Labuan ...	87.6	76.0	81.8	90	73	84	79	88.0	87.7	3.00	76.2	1.06	9	4	—	—	1	263.75	8.51	71
HILL STATIONS.																				
Fraser's Hill, Pahang 4268 ft.	73.1	61.9	67.5	77	59	69	64	71.2	71.1	7.97	202.4	1.94	16	12	2	16	—	157.20	5.07	42
Cameron Highlands, Tanah Rata, Pahang 4750 ft. ...	73.1	53.0	63.1	76	46	68	62	68.8	68.5	13.81	350.8	2.61	18	18	5	2	—	157.60	5.08	42
Cameron Highlands, Rhododendron Hill, Pahang 5120 ft. ...	73.3	58.6	65.9	76	57	70	61	*	*	14.01	355.9	3.05	18	18	—	—	1	171.35	5.53	46

* Not recorded.

Compiled from Returns supplied by the Meteorological Branch, Malaya.